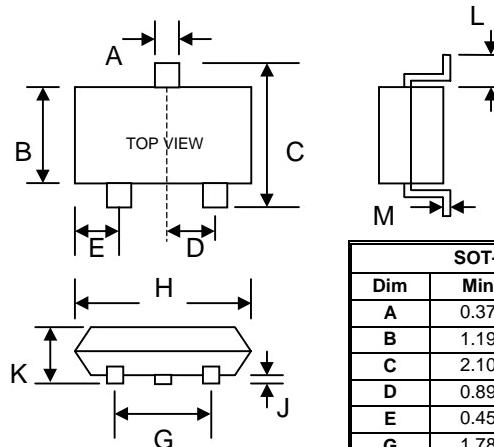


Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O

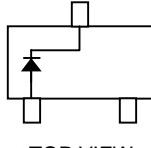
Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.008 grams (approx.)
- Mounting Position: Any

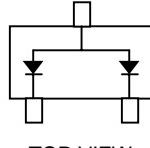


SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178

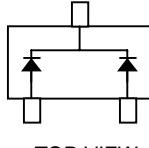
All Dimensions in mm



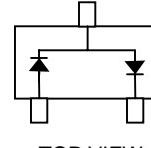
TOP VIEW



TOP VIEW



TOP VIEW



TOP VIEW

BAT54 Marking: L4

BAT54A Marking: L42

BAT54C Marking: L43

BAT54S Marking: L44

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _R RRM		
Working Peak Reverse Voltage	V _R W _M	30	V
DC Blocking Voltage	V _R		
Average Rectified Output Current	I _O	100	mA
Forward Continuous Current (Note 1)	I _F	200	mA
Repetitive Peak Forward Current (Note 1)	I _F RM	300	mA
Forward Surge Current @ t _p <1.0s (Note 1)	I _{FS} M	600	mA
Power Dissipation (Note 1)	P _d	200	mW
Typical Thermal Resistance, Junction to Ambient Air	R _{θJA}	500	K/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +125	°C

Note: 1. Device on fiberglass substrate.

Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(\text{BR})R}$	30	—	—	V	$I_{RS} = 100\mu\text{A}$
Forward Voltage	V_F	—	—	240 320 400 500 1000	mV	$t_p < 300\mu\text{s}$, duty cycle <2% @ $I_F = 0.1\text{mA}$ @ $I_F = 1\text{mA}$ @ $I_F = 10\text{mA}$ @ $I_F = 30\text{mA}$ @ $I_F = 100\text{mA}$
Reverse Leakage Current	I_R	—	—	2.0	μA	$t_p < 300\mu\text{s}$, duty cycle <2% @ $V_R = 25\text{V}$
Junction Capacitance	C_j	—	—	10	pF	$V_R = 1.0\text{V}$, $f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	—	5.0	nS	$I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}$, $R_L = 100\Omega$

ORDERING INFORMATION

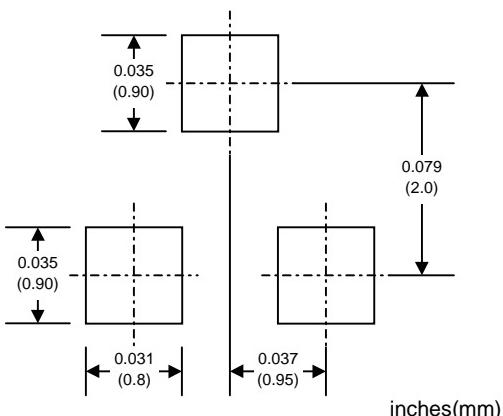
Product No.♦	Package Type	Shipping Quantity
BAT54-T1	SOT-23	3000/Tape & Reel
BAT54-T3	SOT-23	10000/Tape & Reel
BAT54A-T1	SOT-23	3000/Tape & Reel
BAT54A-T3	SOT-23	10000/Tape & Reel
BAT54C-T1	SOT-23	3000/Tape & Reel
BAT54C-T3	SOT-23	10000/Tape & Reel
BAT54S-T1	SOT-23	3000/Tape & Reel
BAT54S-T3	SOT-23	10000/Tape & Reel

Products listed in **bold** are WTE Preferred devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

RECOMMENDED FOOTPRINT



Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

Phone: 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417

Email: sales@wontop.com

Internet: http://www.wontop.com

We power your everyday.